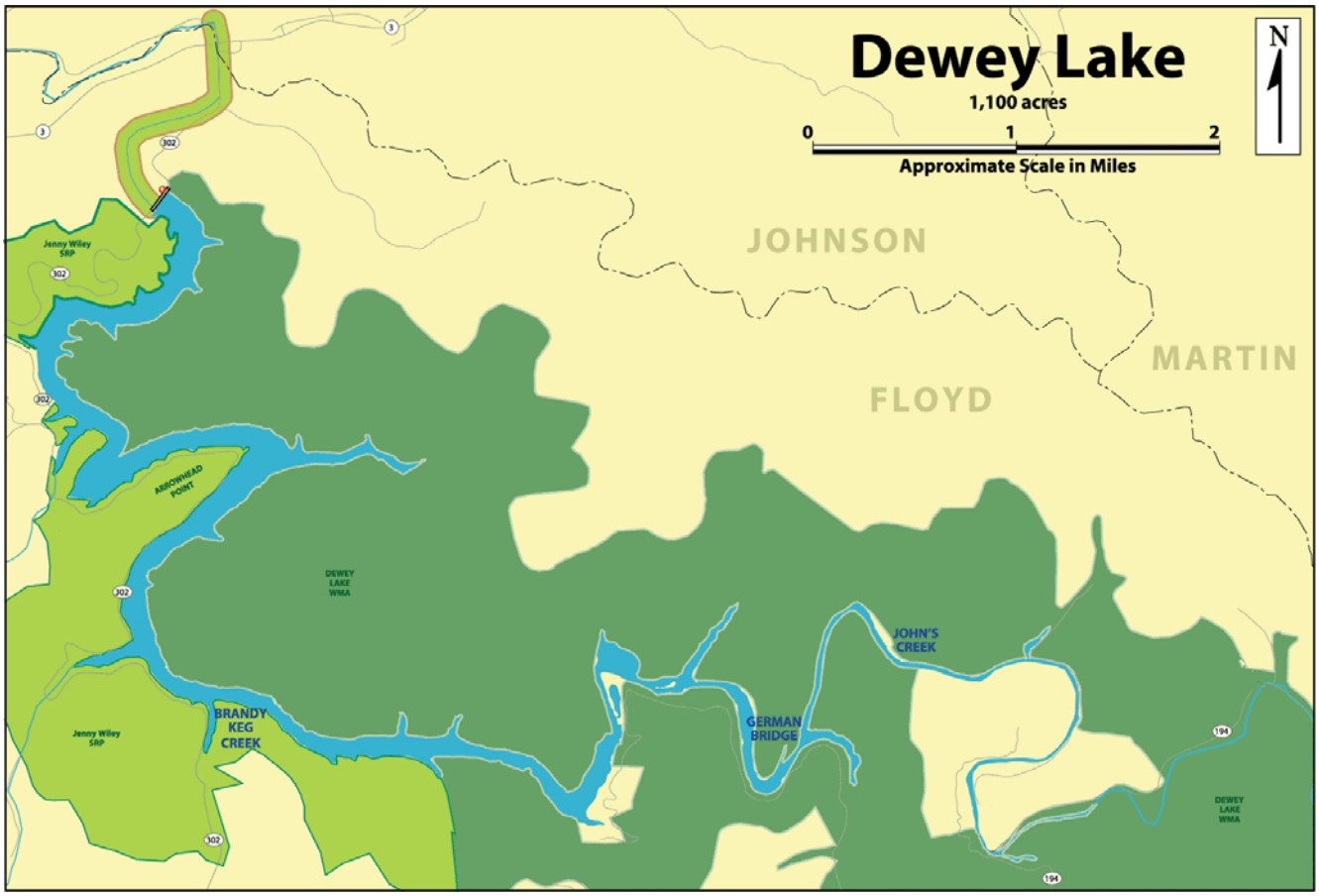
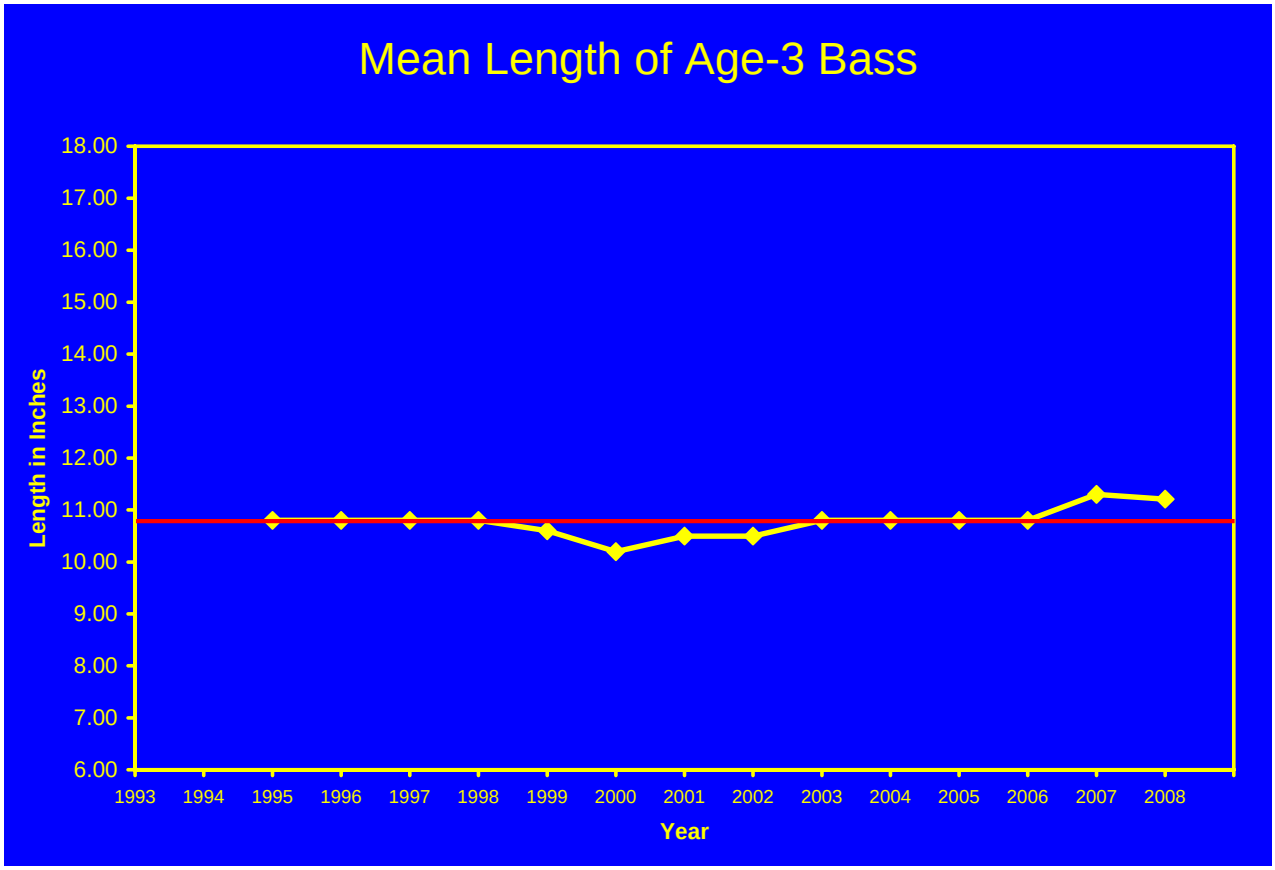
Dewey Lake Bass Assessment 2008

Dewey Lake is a 1,100 acre multipurpose reservoir on Johns Creek. This lake, located primarily in Floyd County, has quietly become a popular fishing destination for largemouth bass, bluegill and catfish. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. Please see "Understanding The Largemouth Bass Assessment" article for an explanation of how the assessment works. *Please note that the minimum size limit for largemouth bass on this lake is 15 inches.*



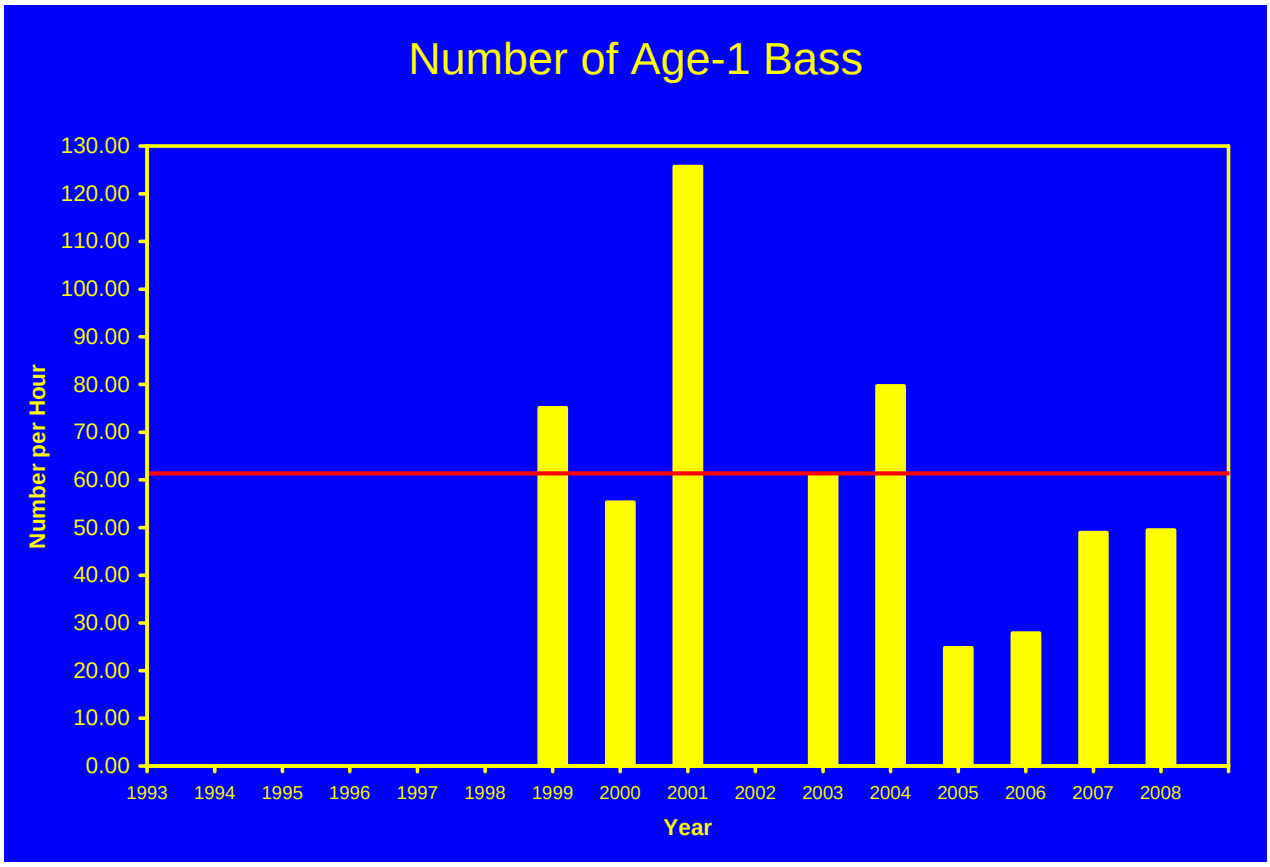
Parameter 1 – Length at age-3 (growth rate)

At Dewey Lake, the length of an age-3 largemouth bass has averaged 10.8 inches at the lake since 1998 (represented by the red line). When compared to other lakes of this size, this is considered to be “poor” growth for largemouth bass. The past 2 years, however, have shown improved growth. Growth rates are generally related to factors such as population density, food resources, and weather patterns.



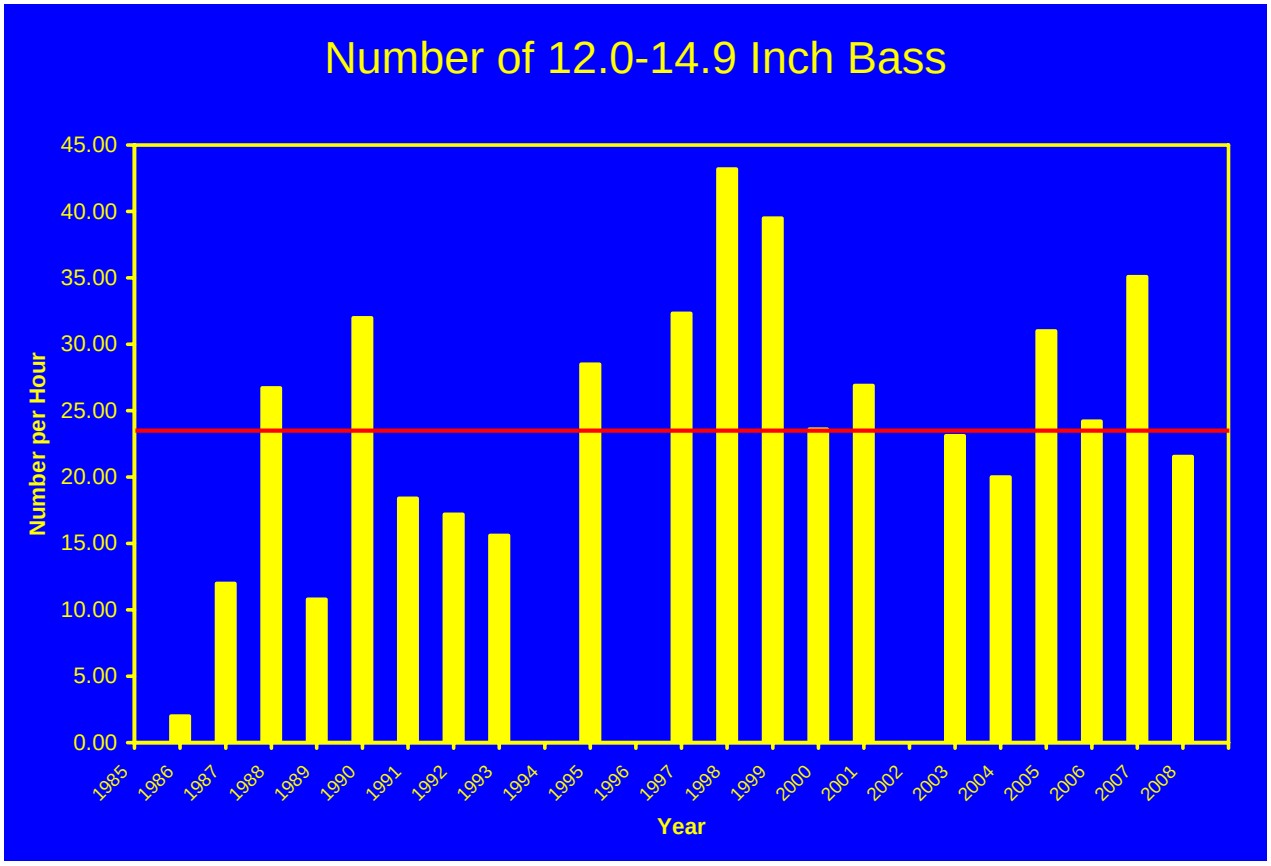
Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the electrofishing catch rates of age-1 largemouth bass to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Dewey Lake, age-1 largemouth bass catch rates have averaged 60.9 bass/hour of electrofishing (see red line). When compared to other lakes in this size range, this is considered to be an "excellent" age-1 catch rate. In 2008, the spring catch of age-1 largemouth bass was just below the 9-year average at roughly 50.0 bass/hour for the second year in a row. This represents an increasing trend since the low in 2005. Although it is not presented in this graph, from 1999 to 2004, largemouth bass have been stocked each year to supplement natural reproduction. Take note that the highest catch rate of age-1 bass was the year after the 2002 high water conditions which facilitated an above average largemouth bass spawn.



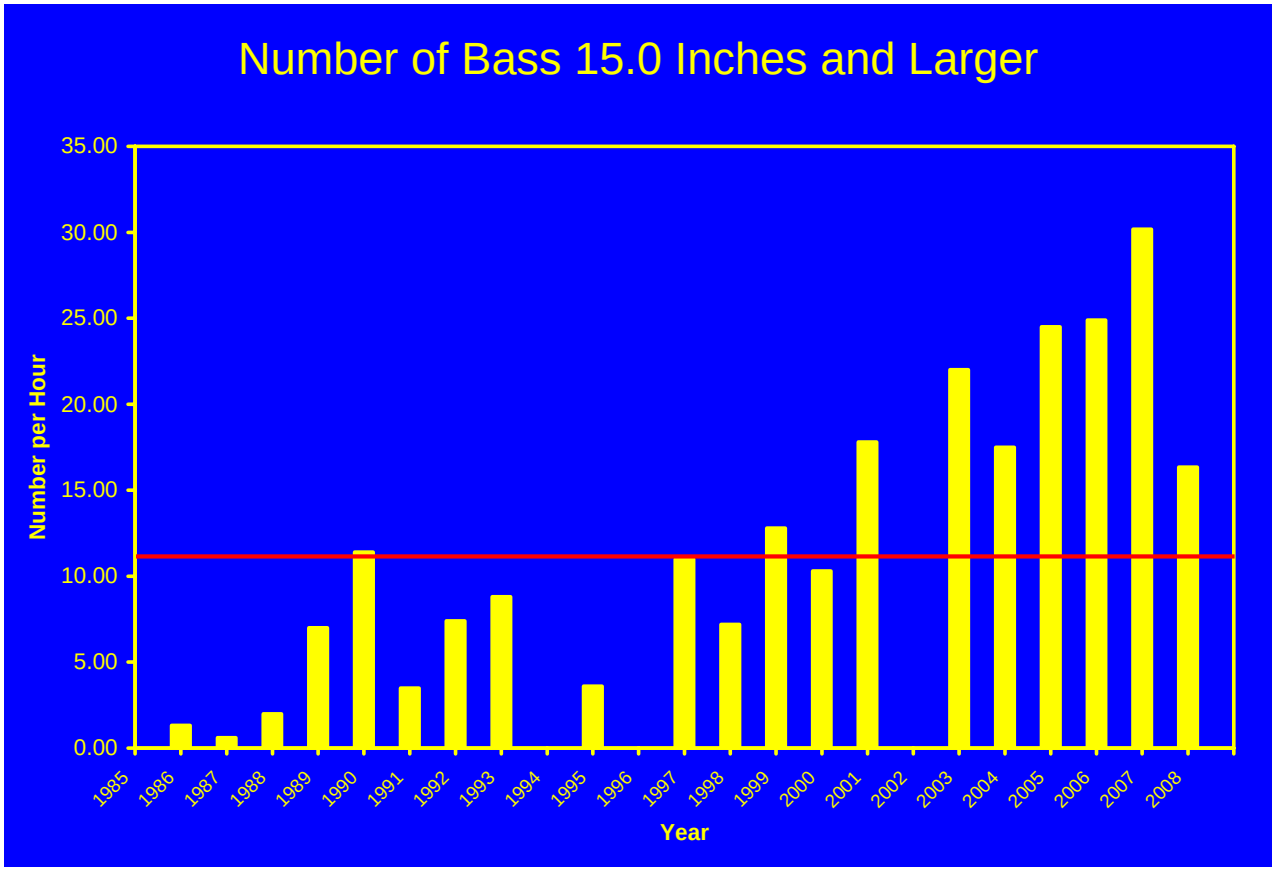
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged 24.2 bass/hour over the years (see red line), which gives Dewey Lake a “fair” rating when compared to other lakes in its size range. In 2008, the catch rate for this size range of bass was just below the 20 year average at 21.5 bass/hour of electrofishing. These numbers are important because these fish will soon grow to exceed the 15.0 inch legal size limit at the lake in the next year or two. As a result, stable or slightly decreasing numbers of larger bass will be available to anglers fishing the lake.



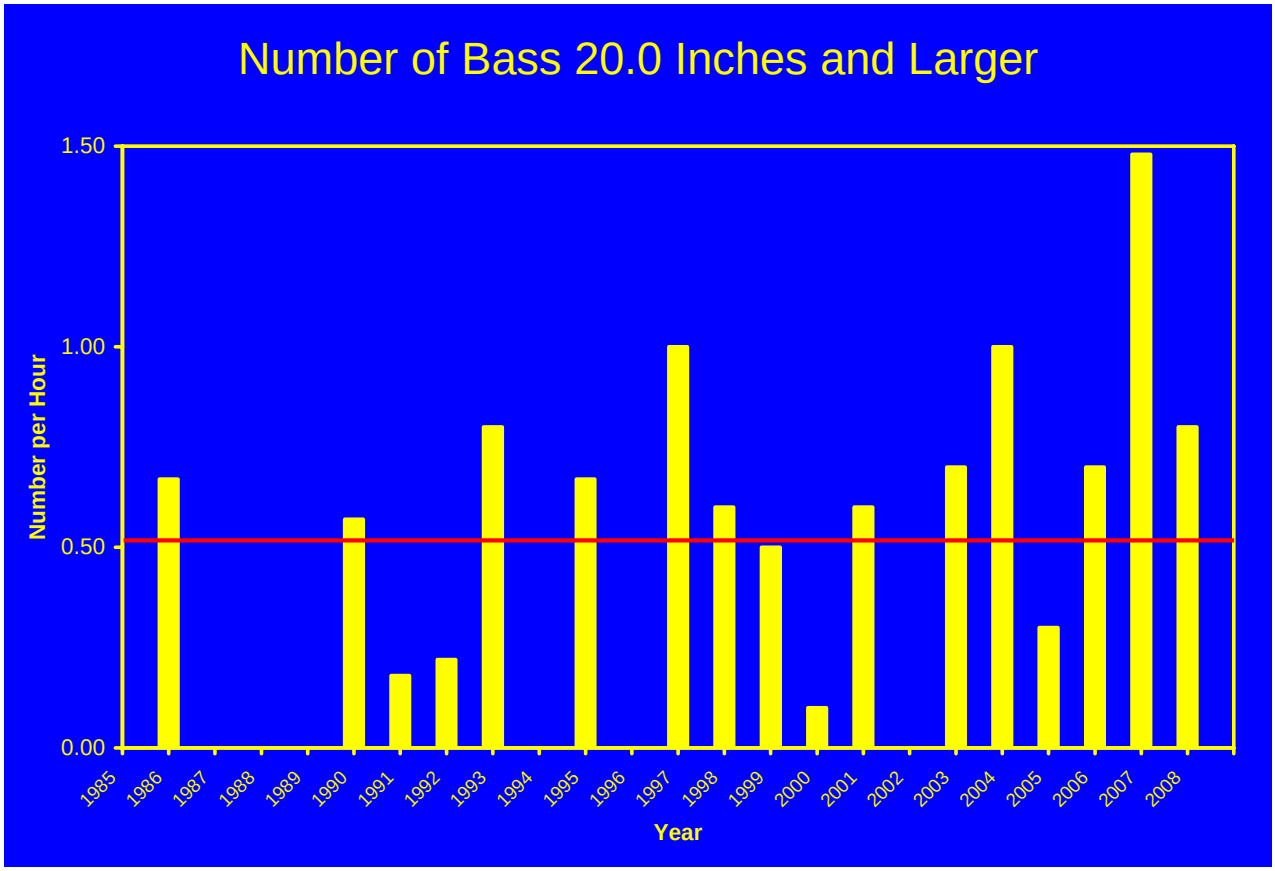
Parameter 4 – Numbers of 15.0 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Dewey Lake has averaged just over 12.0 bass/hour of electrofishing. Again, as compared to other lakes, this is a "fair" catch rate for this size group. Numbers of 15.0 inch and larger bass at the lake had been generally increasing since 1998, but took a downward turn in 2008. This along with the downturn in the catch rate of bass between 12.0 and 14.9 inches leaves cause for concern for the quality of largemouth bass fishing in Dewey Lake in years to come.



Parameter 5 – Numbers of 20.0 inch and larger bass

The electrofishing catch of 20.0 inch and larger largemouth bass has averaged 0.5 bass/hour at Dewey Lake since 1998. This catch rate gives the lake a “fair” rating when compared to other lakes in its size range. In 2008, biologists observed an above average catch rate of 0.8 bass/hour over 20.0 inches. This comes only one year after the high mark of 1.5 bass/hour. Thus, even though an angler at Dewey Lake has a better chance of catching a largemouth bass just over the 15.0 inch size limit, the occasional trophy would not be out of the question.



Overall – Total Assessment Score (All five parameters added together)

Overall, the largemouth bass fishery at Dewey Lake has averaged a “good” rating over the past 9 years. The largemouth bass population at this lake has been fairly consistent until recently. The assessment score between 2007 and 2008 dropped by 3 points (from 15 “good” to 12 “fair”) representing the largest drop since the initiation of this assessment. The arrival of hydrilla at Dewey Lake has both good and bad effects. It provides increased cover to young largemouth bass, but ties up nutrients that once fueled plankton blooms that feed small fish. Filter feeding zebra mussels have also decreased plankton abundance. The presence of these two invasive species will not benefit the largemouth bass population over the long run.